

CLAIMS

1           1.    Method for providing telephonic communication  
2    services, comprising the steps of:

3                   (A)   obtaining an analog signal from a telephone  
4    for selection from the group consisting of:

5                           (i)   initiating a message, and

6                           (ii) receiving a message;

7                   (B)   converting such analog signal to digital;

8                   (C)   creating a plurality of outgoing digital  
9    data packets from individual digital signals, and

10                   (D)   providing an interface for transfer of such  
11   digital data packets to an analog-operated carrier medium,  
12   having hardwired characteristics, selected from the group  
13   consisting of:

14                           (i)   110 volt, 3-phase electric utility power  
15   lines,

16                           (ii)  220 volt, 3-phase electric utility power  
17   lines,

18                           (iii) fiber optic lines,

19                           (iv) coaxial cable, and combinations thereof,

20                   while providing for selection from the group  
21   consisting of initiating a message, receiving a message,  
22   and combinations thereof.

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1           2.    The method of Claim 1, including the step of  
2           selecting an electrical capacitive interface for  
3           transfer of such digital data packets to an analog-operated  
4           electrical power transmission network carrier medium.

1           3.    The method of Claim 1, in which  
2           such digital signal packet transfers are selected from  
3           the group consisting of:

- 4                   (i) voice,  
5                   (ii) data, and  
6                   (iii) combinations of (i) and (ii).

1           4.    The method of Claim 1, further comprising:

2                   (A) receiving a plurality of incoming digital  
3           data packets as individual digital signals;

4                   (B) converting such digital signals to analog;  
5           and

6                   (C) sending such converted analog signals over  
7           such analog-operated carrier medium, with selection from  
8           the group consisting of to a single telephone user, and to  
9           multiple telephone users.

1           5.    Apparatus for providing telephonic communication  
2           service over a carrier medium having hardwired  
3           characteristics, free of a requirement for installing a

4 telephonic hardwired transmission line, by combining:

5 (A) a user service unit, including

6 (i) interface means for connecting such  
7 service unit to a telephone,

8 (ii) digital signal processor means,

9 (iii) coder/decoder means,

10 (iv) control processor means for such  
11 service unit for controlling operation of such digital  
12 signal processor means, including:

13 (a) read only memory with operating  
14 instructions from such central processing unit,  
15 and

16 (b) random access memory;

17 (v) packet controller means, and

18 (vi) carrier access controller means;

19 (B) a gateway means, comprising

20 (i) packet interface means, including means  
21 for connecting to such carrier medium,

22 (ii) multiplexer means, and

23 (iii) gateway central processor means for  
24 controlling operation of such multiplexer means,  
25 including

26 (a) read only memory with operating

27 instructions from such gateway central processor  
28 means, and

29 (b) random access memory; and

30 (C) connector means for connecting such gateway  
31 means to a public service telephone network trunk.

1 6. The apparatus of Claim 5, wherein  
2 such digital signal processor means of such service  
3 unit includes a voice coder.

1 7. The apparatus of Claim 6, wherein  
2 such packet controller of such service unit utilizes  
3 a voice-over telephone chip.

1 8. The apparatus of Claim 7, wherein such carrier  
2 medium is selected from the group consisting of:

3 (i) 110 volt, 3-phase electric utility power  
4 lines,

5 (ii) 220 volt, 3-phase electric utility power  
6 lines,

7 (iii) fiber optic lines,

8 (iv) coaxial cable, and combinations thereof.